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## The American Journal of Photography

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## May

Hail, bounteous May, that doth inspire
Mirth, and youth and warm desire;
Woods and groves are of thy dressing,
Hill and dale doth boast thy blessing.
Thus we salute thee with our early song,
And welcome thee, and wish thee long.

—John Milton.

## Japan through my Camera

ZAIDA BEN YÛSUF

BEFORE I left home on a recent journey I longed for the possibility of leaving cameras behind. I was tired of them. The very name spoiled the prospect of pleasures to come. Yet, no sooner had I actually started on my way than I became infected with the camera fever that seemed to possess every one around me, and by the time we had arrived at Vancouver even I was as enthusiastic as many of my fellow-travelers. To be in the fashion you must sport at least one and know all about the most up-to-date sorts. It's a knowledge, however, that takes its proper place, assuming no undue importance, with the clever, busy people who form so large a proportion of the amateur photographers one meets, and certainly it is an amusement that may be added to a great variety of other interests. Opportunities for the tourist to bring home souvenirs are also open to the foreign resident, becoming in their hands of a more permanent value and helping them to find a pleasure in what otherwise might be tedious months, even years, spent far from home.

I believe these exceptional advantages are beginning to be appreciated. Mrs. W——, of the American Legation in Tokyo, for example, has her coachman trained so that he stops quickly, turning the carriage to right or left in response to her signal, in order that she may use her camera without alighting. Her special hobby is interesting street scenes, particularly of the Japanese quarters. Mr. B——, and his brother, of the English Legation in Tokyo, have good-natured rivalry over fine collections of photographs taken during their frequent hunting trips. One of the daughters of Admiral S——, United States Navy, is amusing herself this year with a panorama camera. Mr. A. H. D., for many years a resident of Yokohama, is also using one for outdoor views. He showed me a very successful lot made during a bicycle tour of Japan. At the time I met him he was going home, taking with him to show his English relatives a lot of portraits that seemed to me must be all the babies of the English set in Yokohama. Mr. and Mrs. T——, of the American

Legation, Cairo, were making a photographic collection of flower arrangements while on their journey through Japan. Count L——, a German diplomat, had with him a kodak to gather souvenirs of his flying trip half round the world and back on some special mission. I found that he, like many others, knew all about the different types of lenses. Monsieur B——, of the *corps diplomatique* in Indo-China, described to me with much practical discrimination things that were interesting to photograph in that part of the world, as well as the difficulties of temperature, impure water supply, and the like. Of course, there are hundreds more, but the point is that what these few are doing may suggest ideas to amateurs traveling in any part of the world under any circumstances.

Everybody seems to be quite reckless as to the number of cameras he gradually acquires. The residents generally order direct from England or France, and, in consequence, the dealers make it their business to supply plates to suit them, as the sizes are somewhat different from American makes. For that reason travelers would be wise to take with them a good supply, if using a camera that required, say, 5 x 7 plates. Even 4 x 5 of American make are hard to get. I do not mean to infer that plates made in one country are better or worse than those made in another; there is merely a practical advantage in getting into the habit of using a certain kind so that you may better understand results and their causes. To change from one to another while traveling is of all times the most hazardous. Film cameras are easy to provide for, as the sizes are universal and dealers throughout the Orient carry supplies for them. I heard complaints that rolls were sometimes affected by the damp climate; particularly, that mould spots appeared after development. Though this is not unlikely, I can remember a curious circumstance indicating quite the reverse. A young French diplomat, whose camera had remained unused during an entire year in India, finding the roll of films only half finished, turned off one or two by way of precaution, exposed those remaining, and had the strip developed; to his surprise it was still perfectly good and all the pictures clear. I had only one plate show mould spots, and that had been in the holder during the rainy season in China and was not developed until quite two months later in Japan. There, as in almost any country, one can now get negatives developed and prints made quickly at very little cost,—not always well done, of course, but that is the case anywhere. Especially during the hot season the sensitive film gets scratched and melted in a way that is distinctly exasperating, but difficult to avoid when it is next to impossible to keep chemicals properly cold. It is under such circumstances that a developing box for films is actually a treasure.

By the northern route the sea journey is cold, but steamer rugs are very little in evidence, as almost everybody joins in the games of croquet, cricket, and bowls, which the officers have so cleverly arranged for ship use. On these Pacific voyages there still remains that friendly atmosphere of settling down to enjoy things that has quite disappeared from our shorter Atlantic journeys, due very much to the fact that there, where the distance from Hongkong to Yokohama is of no more importance than going from New York to Chicago, every steamer carries its little coterie of foreign residents from the ports *en route*, who find this their frequent meeting place.

My 5 x 7 kodak (films) was fitted with only the ordinary lens, such as is sold with that size, and though good in its way, it is, of course, not to be compared with the better grades that are put in when ordered. The shutter was quite quick enough to catch the cricket players in their most excited moments, but the lens hardly equal to such light as one gets beneath the deck awnings.

After the ships leave Kobé they pass through the Inland Sea, where there are many picturesque temptations for the camera. Their fishing-boats and trading-junks are all novel to our eyes. At sea you have the strongest light available for photography, unless it may be snow, which is so absolutely different in the matter of shadow contrasts that it is not a fair comparison. Using a lens of better grade under the same conditions, it was, of course, necessary to reduce to about one half or even one quarter the full opening.

One is almost compelled into poetic mood as the steamers glide silently on their course through this waterway, for which the Japanese have no name, leaving behind them a widening trail of jade at midday, of copper and blue at sunset. All too soon one arrives at Nagasaki, and the restful charm is dispelled, for there all is noisy activity. The steamship guide-books advise travelers that cameras are not allowed on shore without a payment of customs duty; this is quite misleading, however. It is not a question of money at all; the rules regarding fortified areas are the real barrier, and the punishment is confiscation and possible imprisonment. Foreigners have been subjected to both in Japan. They are the same rules that are found in force elsewhere,— in Russia, Germany, or even on our own Government property,— except that the Japanese are absurdly suspicious and exacting. I thought it would be amusing to see if I could get permission to use mine.

But in less than an hour I was back on the *Empress* and we were off for China. Then, as the steward was kind enough to lend us an empty cabin, and we did not require very much water, developing films helped to pass away one or two afternoons. It is hardly necessary to give directions for this. If a developing box is to be used, all one has to do is to follow the instructions provided, only I may supplement them by suggesting a square of rubber cloth for the protection of table tops. Also, I found that washing the film with several changes of water *while in the machine* cleans it so effectually that immersion in still water for about fifteen minutes after taking out is all that is required when rougher handling would be hurtful because of warm or moist atmospheric conditions. The developer that is put up in packages for use with these boxes gives the very best results, but will make ugly, dark brown stains on everything it touches,— hands, carpets, or clothing.

The most popular cameras are usually those that have gained that position by their merits and the quite natural recommendation of one amateur to another. Undoubtedly those arranged for films are most convenient, though plates are nicer to handle for printing and possible retouching. A size 2¼ x 3¼ inches is the favorite; next, a 4 x 5 is attractive, if there is no objection to its weight. Beyond that, the depth of focus in the lens becomes so important a question that constant watchfulness is required and a good eye for measuring distances. I refer especially to the 5 x 7, about the largest size one would select for a hand camera. Naturally, the extra care required brings its own reward, as large pictures are far more interesting; and although, from beginning to end, the cost of supplies is quite double, they require no more time or effort to develop than the small ones. For use with glass plates I consider the smaller of my two, a 4 x 5, very satisfactory. It is fitted with an extra good lens which shows everything in clear focus after ten feet, and carries a dozen plates in metal holders which are opened by a lever instead of by lifting up the camera lid to draw and replace a slide. With this I used a good quality of plate which is noted for the delicacy of detail it will retain, and for developing I had prepared powders, made by the same people for the special convenience of travelers.

Speaking particularly of Japan, where I soon returned, the absolutely artistic quality of all their colors gives a landscape in that country unusual harmony. The shades are better than merely *neutral* to my eyes, because each object retains its own color value and yet accentuates whatever other color may be near it. Their roofs are always a bluish gray; the clothing of the common people is always of that same sort of blue, though dark. On the clean roadways their umbrellas and their clogs are the color of the earth, and when houses are not high, and walls play no important part in the landscape, all these gray tones sparkling in the sun give back what Mr. La Farge describes as the silver atmosphere of this artistic spot. The sum of all this is that here the violet rays have great power, which means that one may reasonably expect very good instantaneous photographs. —*Saturday Evening Post.*

# Mosquitoes and Suggestions for their Extermination

WILLIAM LYMAN UNDERWOOD

IT is the purpose of this article to state, in as simple a manner as possible, the facts that are now known regarding mosquitoes and how to deal with these pests, and it is hoped that this information may help to secure a more general cooperation in the work of mosquito extermination.

Few people realize that there are a great many different kinds of mosquitoes. Some three hundred species have already been described, and in the United States there are about fifty species, belonging to nine different genera. The most common of these genera in the northern states are *Anopheles*, the malarial, and *Culex*, the ordinary, mosquito. Of the former there are two species and of the latter at least fifteen.

Only these two genera and the methods for their extermination will be especially considered; and as these methods may also be successfully applied to the other kinds of mosquitoes, no detailed description of the others need be given.

Mosquitoes cannot develop or come to maturity without water in which to live during the first weeks of their "wiggler" existence.

A mosquito's life is divided into four stages, — the egg, the larva, the pupa and the adult insect. In the larval and pupal stages, mosquitoes are more commonly known as "wigglers" (see Fig. 1). Both *Anopheles*, the malarial, and *Culex*, the common, mosquito larvæ are present in this picture. Mosquito "wigglers" may frequently be found in rain-water barrels in as large numbers as are seen in this photograph. The female mosquito lays from one hundred and fifty to four hundred eggs upon the surface of some quiet water, and in a day or two these eggs develop into the larval or second stage (see Fig. 2).

It will be noticed that *Culex* hangs with its head down, and from its tail upward to the surface of the water extends a small tube. Through this tube it breathes. *Anopheles* rests just beneath and parallel to the surface of the water, and its breathing tube is much shorter than that of *Culex*. These resting positions are quite different, and each is characteristic of its kind. Except when disturbed, *Anopheles* is generally to be found at the surface, breathing and feeding in this position. *Culex*, on the other hand, comes to the surface only occasionally to breathe. It stays below the water for the greater part of the time, and is often found feeding from the bottom.

At the end of a few days the larvæ change into the pupal or third stage (see Fig. 3). To the left is seen the larva skin out of which this pupa has just come. The difference between *Culex* and *Anopheles* in this, the final stage of "wiggler" existence, is very slight. Both now live at the surface of the water, and they breathe through two funnel-shaped tubes situated one on each side of the thorax, or "head." Unless disturbed, they remain motionless in this position at the surface until the time comes when, as adult mosquitoes, they leave the water (see Fig. 4). This is the critical period of a mosquito's life; for should the surface of the water be disturbed at this time, the insect would be upset and drowned. It takes about seven minutes from the time when the skin along the back of the pupa begins to split until the full-grown mosquito comes forth and in a few minutes is ready to fly away. A mosquito never grows any larger after this change.

The length of time required to pass from the egg to the adult insect varies from ten days to three weeks, according to the temperature. Warm weather hastens their development, while low temperature checks it. The "wigglers" of some species of mosquitoes live through the coldest weather of our northern winters unharmed, ready, when the first warm days of spring have come, to complete their natural changes.

Most of the mosquitoes that annoy us are bred near by, often, though unknown to us, in our own dooryards. Any water that is accessible to mosquitoes and whose surface is undisturbed by winds or rapid currents furnishes a breeding-

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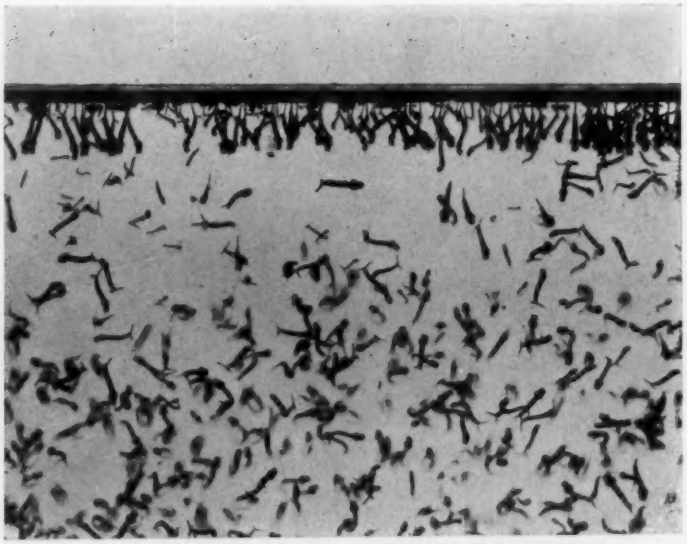


FIG. 1. — Mosquito "wigglers" (larvæ and pupæ) in the water. Life size.

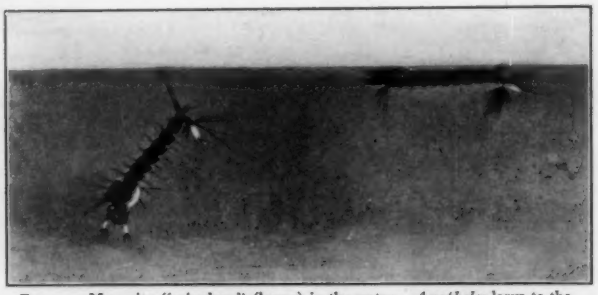


FIG. 2. — Mosquito "wigglers" (larvæ) in the water. *Anopheles* larva to the right, *Culex* larva to the left. Three times as large as life.

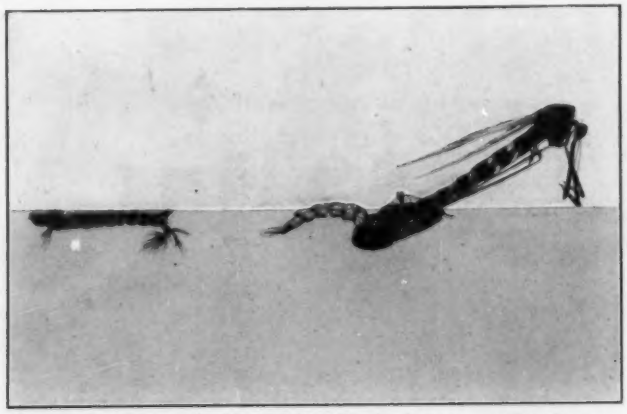


FIG. 4. — An adult mosquito (*Anopheles*) transforming from a pupa and coming out of the water. Three times as large as life.

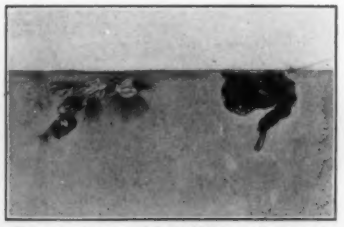


FIG. 3. — A pupa, the third stage in a mosquito's life. Three times as large as life.

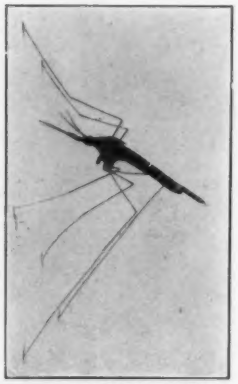


FIG. 5. — Profile of *Anopheles punctipennis* (female). Three times as large as life. Showing the characteristic resting position of this mosquito.

FIG. 6. — Profile of a *Culex* mosquito (female). Three times as large as life.

FIG. 7. — Profile of a male *Culex* mosquito. Three times as large as life.

place for them, and "wigglers" may often be found in water standing in old tin cans or bottles, in rain-water barrels, in pools in the rocks, in roof or street gutters that are not properly drained, in cesspools or in catch-basins, in fact, in any place that will hold water for a week or two, no matter how small the quantity, even if only a few teaspoonfuls.

Since we know that without water mosquitoes in their first stages cannot exist, it naturally follows that all standing water should be done away with or treated in such a manner that "wigglers" cannot live in it nor mosquitoes get to it to lay their eggs. To this end all cans, bottles, and every discarded utensil that will hold water should be removed. All stagnant pools, where it is possible to do so, should be drained or filled up. Cisterns, rain-water barrels, and cesspools should be screened or otherwise covered to prevent the adult insects from having access to them. Where it is not practicable to fill, drain, or screen the places that are suitable for mosquitoes to breed in, the surface of the water may be covered with kerosene oil. This oil, when spread over the water, prevents the "wigglers" from getting air when they come to the surface to breathe, and so kills them.

An ounce (two tablespoonfuls) of kerosene will spread over fifteen square feet of water surface, forming a film thick enough to kill all the "wigglers" that are beneath it. Kerosene of a cheap quality, known as high test light fuel oil, is preferable for this purpose. It can usually be bought at eight cents a gallon. If oil of this quality is not available, ordinary kerosene will answer the purpose. It should be applied as often as once in two weeks, for by that time the previous application will have evaporated. A sufficient quantity should be used, in the proportions named, to cover completely any place that may need treatment.

Any one who is ill with malaria or yellow fever should be carefully protected from mosquitoes; for should a person be bitten by an *Anopheles*, the malarial mosquito, or *Stegomyia fasciata*, the yellow fever mosquito, at this time, there would be great danger that the insects might fly away and bite some one else, and thus spread these diseases. Screens for both doors and windows form the best protection against mosquitoes at all times; but it often happens that the insects get into our houses, even though they are thoroughly screened, generally through some door or window that has been left open by mistake, or they may gain an entrance by coming down an unused chimney if the flue is allowed to remain open during the summer time. A house or a room may be cleared of mosquitoes by burning pyrethrum powder and allowing the smoke, which is not at all offensive to most people, thoroughly to fill the room that is under treatment. This smoke kills or so stupefies the insects that they will not bite. Pyrethrum powder is a preparation of the plant *Pyrethrum roseum*, and is sometimes sold as Persian Insect Powder or Dalmatian Powder; it can be bought at any drug store for about thirty-five cents a pound. It is a very fine, light powder; and a pound of it will go a long way, making a large volume of smoke. A pyrethrum smudge or smoke may be started by covering a live coal, taken from the kitchen stove, with the powder, first placing the coal upon a small shovel, so that it may be moved about conveniently without danger of setting anything on fire. The pyrethrum will quickly begin to smoulder and give off a dense smoke. All that is now necessary is to add from time to time a pinch of powder as occasion requires, merely keeping the smouldering ashes covered so that they will give off a smoke. People are frequently annoyed and sometimes driven into their houses on summer evenings by the persistent attacks of mosquitoes. On such occasions, pyrethrum powder can often be used to advantage; and the smoke from a small quantity of the powder kept smouldering upon the piazza will drive away most, if not all, of the pests, thus making it possible to enjoy an evening out of doors in comfort, when otherwise life would be unbearable except behind the protection of screens.

The *Anopheles*, or malarial mosquitoes, though not very common (see Fig. 5), are breeding abundantly in many parts of the United States; and by referring to the accompanying photographs, particularly the ones in profile, it will be seen that there is quite a difference between the malarial and the common, or *Culex*, mosquitoes.

*Anopheles* may easily be distinguished from the common or *Culex* family of mosquitoes by the spots upon their wings, and also by the position which they take when at rest (see Fig. 5).

Notice the angle at which the insect shown in Fig. 5 stands out from the wall. Compare this with Fig. 6. It will also be seen that the proboscis, or "stinger," and the body of *Anopheles* form a straight line, while the *Culex* is rather humpbacked. The other *Anopheles, maculipennis,* does not stand out from the wall at quite such an angle as does *punctipennis;* but like the latter its proboscis and body form a straight line, and the angle formed by the insect when at rest is much greater than that of the *Culex.*

Notice how different is the resting position of the *Culex* mosquito in Fig. 6 from that of *Anopheles* in Fig. 5.

The male mosquito (see Fig. 7) never bites. He may be easily distinguished by his large and feathered antennæ and palpi, which are very much more prominent than those of the female.

There is another mosquito, *Stegomyia fasciata,* which in form and habits closely resembles *Culex,* in which genus, until quite recently, it was classed. *Stegomyia fasciata* is the yellow fever mosquito, and it inhabits only the warmer portions of the country. It is common in most of the southern states and is seldom seen north of the Carolinas. It is easily distinguished from other mosquitoes by the conspicuous silvery white stripes upon its thorax and abdomen, and by the white bands upon its legs.

Fortunately for mankind, Nature herself provides many energetic workers which are constantly doing their part towards holding in check these insect pests. Foremost among these natural enemies are many of the insectivorous birds, which daily destroy many thousands of mosquitoes. The swallows, the fly-catchers, the nighthawks, and the whip-poor-wills, all are insect exterminators, whose good work in this connection is seldom taken into account. The bat is also an efficient mosquito hunter; so, too, are the dragon-flies which frequent the shores of ponds and pools where mosquitoes breed.

Besides these enemies of the adult mosquito, which may properly be called their "foes of the air," mosquitoes have other adversaries which destroy them in their early stages. These may be termed their "foes of the water."

It often happens that we can find no "wigglers" in small ponds in which we would naturally expect to find mosquitoes breeding. In such ponds the presence of fish may account for the absence of mosquitoes. Their larvæ furnish food for many species of our smaller fishes, and by them myriads of mosquitoes are annually destroyed. Goldfish are particularly fond of mosquito "wigglers," and one pair of fish was seen to eat ninety-eight "wigglers" in four minutes. Goldfish will live and multiply in almost any small and shallow pond where the water is warm. They are perfectly hardy and will thrive just as well and perhaps better in stagnant water than they will in flowing streams.

A few words as to the illustrations. To obtain the pictures of the adult insects I made a small glass cage about an inch and a half high and wide, and half an inch deep. The mosquito was placed in this enclosure, and the cage was placed in strong sunlight, or the light was thrown upon the insect with a mirror. I used an ordinary 7-inch Goerz lens, stopped down to F 43, and the pictures were secured with a minute's exposure. It would seem at first thought that it would be impossible to get a mosquito to stand still for a minute, but under the right conditions of temperature it can be accomplished. The pictures of the insects in profile were made with a larger stop, and only a few seconds' exposure. In all cases my original negative showed the insect twice the natural size. The photographs of the "wigglers" in the water were made with flash-light, and the insects were confined in a small glass cell, the inside walls of which were about an eighth of an inch apart. This kept the object to be photographed in constant focus. With stop F 16, one eighth of an ounce of Luxo powder fired in an Imperial flash-gun held sixteen inches from the glass cell gave the required light. This branch of photography is not at all easy, and requires considerable patience, and a good supply of plates. All the pictures were taken on Cramer Crown plates, and developed with the maker's pyro-soda formula.

# In the Swamps with a Camera

JOHN BOYD

THE swamps and marshes have an attraction for the artist-photographer who wishes to include their general outlines in his compositions; but neither he nor his more plodding brother,— the nature-camerist,— have yet shown us one thousandth part of their true beauties, surrounded as they are by green banks of rushes, that mark the margins of the elastic shaking surface of bog moss, and lead to the cool, oozing, stagnant water of the inner channels.

There the pitcher-plants grow in abundance, their hollow leaves almost always full of water awaiting their insect victims. The dainty white buttercups peer up here and there, seemingly steadied by the great leaves which lie beneath the surface of the water. The pads of the water-lilies form a causeway for the rails and mud-hens, and the white and yellow flowers invite us to pluck them, stems and all, from their watery beds. The arrowhead stands up in graceful elegance; and amidst its background of rushes it offers, with its delicate flowers, a pleasant study for the photographer.

Such are some of the flowers that inhabit these almost inaccessible spots, and from them we pass on to the life that abides among the hidden masses of vegetable growth. We note the Virginia rails, those graceful water-nymphs, by whose nest we can linger hours, in the hope of picturing it and its owners, as they shyly return to their precious charge. The mud-hens cackle as they feed, and at times can be approached near enough for a passing snap-shot. The marsh and red-winged blackbirds hang sideways from the tall rushes, and resent with long-drawn screeches intrusion on their domestic affairs. Up in the shallow part stands a great blue heron, his position as rigid as a steeple; there he waits the passing fish or frog, and with care he is readily pictured in his home haunt. The American and the least bittern are likewise capable of being approached, especially the former, who is at times so stupid as to permit being touched with the oar or paddle. The turtle on his log, and the frog by his heap of mud, are the best of subjects; and even the sinewy water-snake will hold his little head above the water long enough to permit his picture to be taken.

One could go on thus for pages, but what is the use? The marshes are there, and we have but to invade them to find all the subjects we may wish.

The preparations are simple, but they should be made carefully if we would work in comfort, and attain the best results.

The tripod must be given particular attention, as in the matter of time exposures we have to be ready to make them in water two to four feet deep; or again, near or on the land, where we need only the height of a few inches. When working in a bog or water, I find it a great help to attach three triangular pieces of board, about six inches each way, to the bottom of the legs. This prevents the points from sinking in the ooze, and gives a solidity to the tripod when it is carrying the weight of the camera. For working on the pitcher-plants, a frog, or any subject that requires a low support, I have a home-made affair, some two and one half feet in height, made of three pieces of bamboo, attached permanently to a solid head. This, when extended, will permit the camera to come within a foot of the ground, and is a valuable help in placing the camera at the correct height.

A pair of rubber boots coming to the hips is a necessity; and if we can supplement them with a canoe or small rowboat, we can often reach the desired spots more quickly. This is also useful as a "tender," when working in the water, as it floats where we want it, and carries all our impedimenta to the scene of action.

The greatest care must be taken of the camera, lens, and holders, when working in the water, and one should make it a rule never to act hastily. It is well to see that every portion of the outfit is made secure before taking hold of the next, otherwise one may find that a valuable lens or some other part has dropped out of

sight into the slimy mass on the bottom, where the chances of recovery are slight.

The subjects we have to deal with are always on the move, the birds and animals being restless, and the flowers and plants ceaselessly swaying to and fro; so we shall have to make quick exposures, and I favor nothing slower than one tenth of a second, except it be for turtles, frogs, or snakes, basking on a log in the sun. The lens should, therefore, have as full a covering power as possible, so that correct definition may be had at the larger openings.

The plates should be of the fastest, combining non-halation and orthochromatic qualities, to supplement the action of the lens in the correct rendering of detail and color values.

I am a firm believer in the utilization of our brains, instead of our dry plates, in all classes of nature work, and favor counting the results, not by the number of exposures we are able to make, but by the class and quality of the fewer subjects we gather from time to time. Don't spare yourself in obtaining the best possible result from whatever you have set out to picture; have your wits about you at all times; know what you want; take it when it comes, for if you don't you will regret your indecision ever afterward. Cultivate the habit of striving to excel; cherish the thought of outdoing all others in your particular field; be honest in your work, and methodical in your actions, so that spoiled plates will not be your reward for days spent in the healthy pursuit of capturing the images of Nature's children.

For backing our plates we can use any one of the many mixtures, — some of which are good, others nasty and sticky. The best is the E. W. N. compound. If this is not available, the following mixture is readily prepared, being made of simple ingredients, obtainable anywhere:

| | |
|---|---|
| Water | 10 ounces |
| Gum | 1 ounce |
| Powdered burnt sienna | 1 ounce |

It is brushed over the back of the plate with a stiff brush, the drying being accelerated with a fan. After exposure it is removed with a moist tuft of cotton before being put in the developing tray.

For developer, I believe in following the maker's formula, as he is most likely to compound a solution that harmonizes with his plates.

A one-solution developer that has found much favor, and which works nicely on many of the standard plates, is made thus:

| | |
|---|---|
| Water | 1 quart |
| Metol | 3-4 ounce |
| Sodium sulphite | 7 ounces |
| Potassium carbonate | 3 1-2 ounces |
| Potassium bromide | 1-10 ounce |

This has good keeping qualities if placed in small bottles, and kept well corked.

Of the printing little may be said, — it is largely a matter of choice; but if you want your results to show beauty, atmosphere, and be a joy forever, use platinum. It is, of course, more expensive than printing-out and development papers, but its permanence and other qualities compensate for the difference in price.

It is not difficult to use, as some seem to think; still, there are a few precautions that must be observed in order to get the best results. Do your printing on a dry, clear day; examine the prints in a weak yellow light, or you will veil the whites. Always use a rubber pad to back up the paper while printing. Print, if possible, in the shade. Keep your developer of good strength, and at a temperature of 80 degrees. Use plenty of the acid fixing-bath. Full information is given with the paper; read the directions fully; carry them out faithfully; and if you do not have nice prints, look first to yourself to see if you have not disregarded some of the instructions. If you are sure you have not, then write to the makers, enclosing one of your own prints and a marked piece of unexposed paper. They will either make you a good print, telling you where you have failed, or send you another lot of paper.

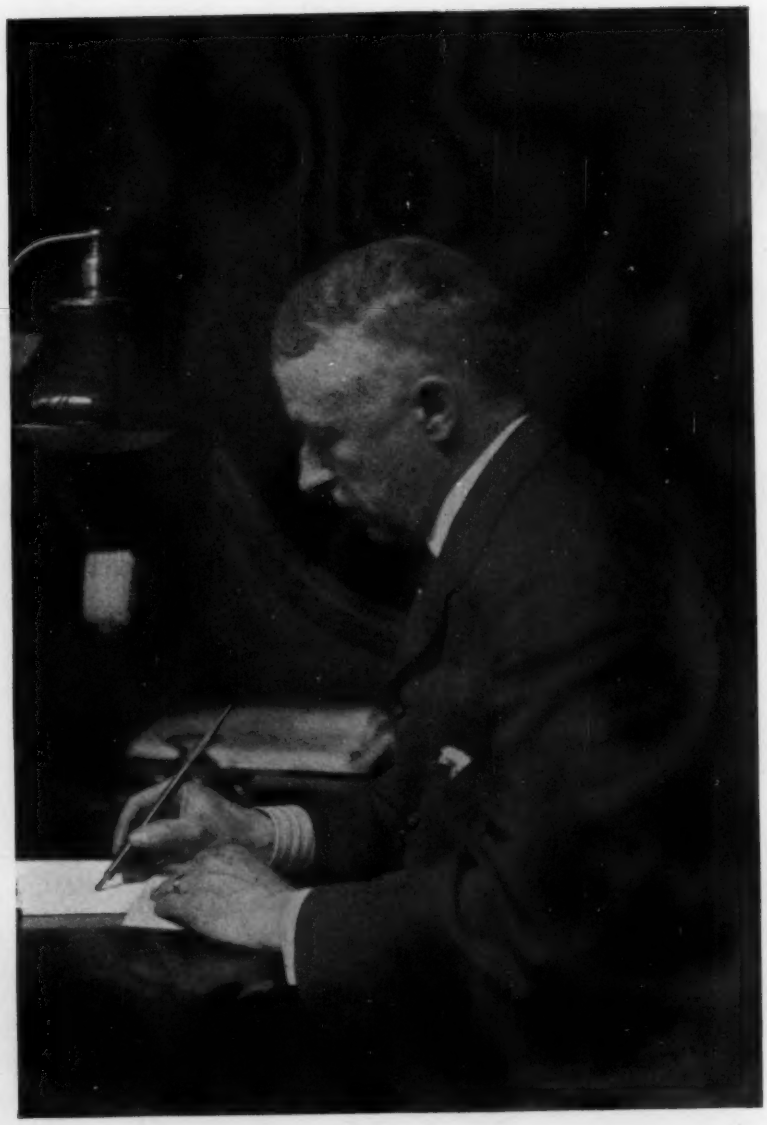
"TALL POPLAR TREES THEIR SHADOWS THROW"
BY RALPH E BROWN

PHOTO ERA

SOAP-BUBBLES
BY MATHILDE WEIL

THE HEAD OF THE LAKE
BY C F CLARKE

PHOTO ERA

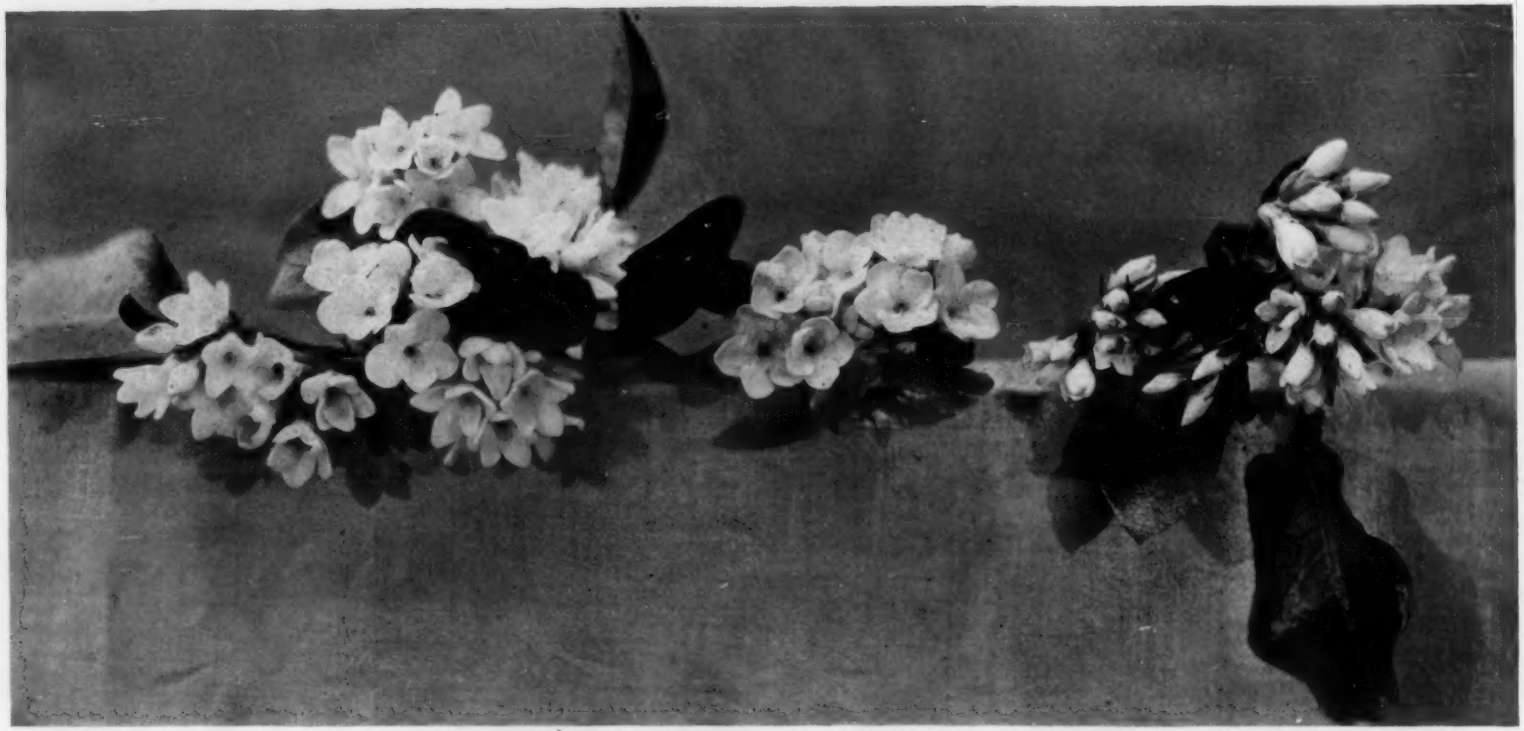


PORTRAIT
BY GEO T POWER

PHOTO ERA

ON THE CHICAGO RIVER
BY WM P GUNTHORP

PHOTO ERA



MAYFLOWERS
BY ARTHUR B CROSS

THE PICTURE-BOOK
BY CLARISSA HOVEY

PHOTO ERA

GRAY DAYS
BY A F SHURROCKS

PHOTO ERA

# PHOTO ERA

## The American Journal of Photography

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**Vol. XII** **MAY, 1904** **No. 5**


The first of May! Woods, and a rocky shore;
South winds from Eden o'er a sea of glass,
Earth velvet carpeted with emerald grass;
The wooded ground with wild flowers spangled o'er,
Anemones, hepaticas, and store
Of yellow adder's-tongue, and violets blue,
And clustered pepper roots, besprent with dew,
And bloodroot's spotless chalice, pure from gore,
And frail beauties, delicate and sweet,
And nodding columbine with scarlet glow,
And countless things all bursting into blow,
The vernal queen of all the year to greet.

—TAYLOR.

***Landscapes and Flowers*** Small, indeed, must be the soul of the artist photographer who has no welcome to extend this magic month of May, when all nature is being born anew. The earth is robed in garments of tenderest green, carpeted with flowers, and the air is filled with languorous blossom scents. The picture given above in the lines of the poet of a May landscape ought to serve as an inspiration and help to the imagination of the photographer. Flowers and landscape studies direct from nature are the pictures most sought after this month. Simple pictures showing good composition, beautiful and proper space relations, expressing fully the essential features, and omitting uninteresting detail, — these are the qualities that make for true art in a landscape picture. Art springs from the imagination, and in making landscape photographs there is splendid opportunity for the exercise of this faculty. The development of part of a landscape into something quite different in spirit from that of the landscape itself is wholly legitimate and carries out and sets free the spirit. The consciousness of a power to create is always inspiring to any worker.

In flower studies, the efforts should be to express the beauty and life of the flowers as near as possible on the photographic plate. To this end, the art of flowerarrangement should be carefully studied. In Japan, it is said, this art is as highly regarded as music, poetry, or painting, and quite as much time and study is deemed necessary to master it, as for any other form of art. "The arrangement," according to Worres, "is usually based on three lines, rising gracefully from the neck of the vase. The center or principal line should be the longest, the second one half, and the third one fourth of the length of the first. These stem lines are not allowed to cross each other in a way to form angles, nor permitted to run in parallel lines."

***American Photography at St. Louis*** The Louisiana Purchase Exposition has been formally opened. There has been a good deal of nagging criticism of the officials of the fair, and the usual crop of jealousies and quarrels has been reaped. "That is the way the fairs begin," says the New York *Sun*; "a lot of hard work — for three years in this case — and a reasonable amount of friction. But the show is open to the world; and the world will go to see it. Several thousand kinds of education and brands of enjoyment are to be had there; and the 'knock' of the 'knocker' should be hushed. We wish all prosperity to the exposition. May it be not unworthy of what it commemorates!"

We should like to be able to keep these words standing until they sink deep into the minds of

some of our Photo Secessionist friends, who have furnished their share of knockers and are still knocking.

In a recent issue of the *Amateur Photographer* (London) Mr. Alfred Stieglitz rises to inquire "Why it is, that with the press, the great photographic professional world, and the many camera clubs and photographic societies all on one side, and the Photo Secession alone on the other, that when the Photo Secession remains neutral and passive in St. Louis, the American photographic pictorial exhibition at St. Louis promises — unless something unforeseen happens — to be a dismal failure, notwithstanding the hubbub and the large amount of advertising done by and in the majority of the photographic press? What does it all mean?

"Possibly," he adds, "the Secession's attitude may seem preposterous to the English and to the French; indeed, it has been so asserted."

The average sane mind is pretty much the same all over the world, and a thing that is preposterous in England and France is likely to be the same in America. But the point we wish to call attention to is that the World's Fair has been opened on time and that experts have been appointed to select and hang the best specimens submitted for the photographic exhibit.

The members of the jury of selection of photographs submitted for exhibition in the American photographic department of the Liberal Arts Building are Messrs. George Nussbaumer of Buffalo, Curtis Bell, president of the Metropolitan Camera Club of New York City, and F. Dundas Todd, of Chicago. Furthermore, they report that they will have an excellent exhibit, as there is plenty of material to select from; and as they have been instructed to preserve a very high standard, it has caused them to discard an unusually large percentage of the photographs which have been submitted from every State in the Union. They will divide the exhibit into two principal classes, — pictorial photographs and photographs which display technical skill in production. Besides these classes there will be another, composed of colored photographs and photographs of subjects of outside interest.

There will be about 100 photographs in the pictorial section, and about 150 in the technical section. The number of photographs in the other section has not been determined.

We are calmly waiting, with no serious misgiving as to the result.

***English Photography at St. Louis*** There can be little doubt but that English photography will be better represented at the World's Fair than that of any other country. Although the same divisions of opinions exist between the Linked Ring and the Royal Photographic Society of London, for instance, as between the so-called Photo Secession and the representative camera clubs of America, nevertheless our English cousins have the saving grace of good sense and rare civic pride, when their country's honor or the honor of their beautiful art is in question. On this particular occasion, whatever their individual preferences may have been, they have sunk their private differences and have fallen to, as a unit, and with a right good will, to make the exhibit of English photography at the World's Fair a grand success.

Sir William Abney, President of the Royal Society, is the Chairman of the Commission, and is specially charged with the scientific section; Sir Benjamin Stone has the historical record and survey prints; while a special committee, including Messrs. A. Horsley Hinton, George Davison, and Reginald Craigie, have charge of the pictorial section of the English exhibit. Over 900 frames will be hung in these three classes.

Mr. Horsley Hinton, who is now in St. Louis to superintend the hanging, describes in a recent issue of his paper, the *Amateur Photographer*, of London, how the selection of pictures was made. "As far back as last summer, Sir William Abney called on me. He also communicated with Mr. Geo. Davison and Mr. Reginald Craigie. We met several times, and after going carefully through the 'Royal' and the 'Salon' catalogues for the past few years, we drew up a list of some 300 odd pictures which we thought representative of British pictorial photography. I issued the invitations and grappled with the resulting correspondence, — a big job, but I cheerfully undertook it, as well as that of arranging the space, devising designs, and choosing

material for the wall decoration, and so forth. It was a distracting and fatiguing task for a man already sufficiently busy," he modestly adds, "but some one had to do it." And then he sums up in a few words the motive which actuated the commission, and which ought to be printed in letters of gold: "*The purpose being to show what British photography is doing — not to advertise or exploit individual British photographers. We have not tried to represent every pictorial worker.*"

Such sentiments as these show a breadth of mind and a conception of public duty that is truly commendable. It means the assured success of any enterprise, whether it be the selection of a representative photographic exhibit or the sale of shoe-strings. We heartily wish there were some Horsley Hintons among the pictorial workers in our own country. It would make the yoke sweet and the burden light for those who are battling for the success of pictorial photography in America.

***Our New Contemporary*** On the 30th of April occurred an incident of some little moment to those responsible for it, and one, in their opinion, calculated to probably cause a big splash in the puddle of photography: to wit, the initial leap into publicity of the New York *Photographer*, a new weekly periodical. A slight ripple was observable in the quiet back reaches of Fall River, Mass., where the leading photographic dealer found a batch in his mail, sent on suspicion; but a diligent search of the six leading supply stores of Boston failed to reveal that the new infant had even been heard of. Not having been favored with a copy for review, we made strenuous search, and finally secured our prize by great good fortune, express collect from Fall River. What was our joy to find that the PHOTO ERA figured in its columns four times, equally divided between attacks on our knowledge and quotations from our articles. 'Tis better to be attacked than to be ignored, from the point of view of publicity, and so we feel too happy to notice seriously the animus of the *able* editor Abel.

The editorial announcement is: "We are building this journal, not for any one school or class of photographers, but for the greatest number." Maybe, perhaps 'tis true, but lurid writ between the lines and at the bottoms of the articles we note the magic word "*Secesh*" on every page. The pictures reek with it, save one made by a shutter-maker. Those laid out for constructive criticism make even the trained art-critic admit that he can "only gradually discover" their beauties, much less analyze their component parts. The ordinary observer can but look and wonder. We might proceed, but why? We were young once ourselves, and we hope we have improved. Yet there is room for the right kind of photographic weekly, and we welcome this newcomer to the field, extending best wishes for its success.

***The Edition de Luxe*** The May *Édition de Luxe* of the PHOTO ERA will be an especially attractive number. The pictures will all be mounted on papers made by the Niagara Paper Mills, of Lockport, N. Y. This progressive firm has, during the past year, paid especial attention to the manufacture of papers particularly suited for mounting photographs. Among their recent achievements, which is a triumph of American industry, is the production of a line of papers called "Italia." This is the successful reproduction in this country of the hand-made charcoal papers of France and Italy, and the various shades are peculiarly suitable for mounting purposes. These are well represented in the number, as well as various colors of Royal Melton, Homespun, Sultan, and other cover papers. The name of each paper will be found under the print, and any of them may be ordered by name from the PHOTO ERA office.

***The Photo Era Trip to Europe*** We would again call the attention of our readers to the opportunity for photographic and artistic study, as well as sight-seeing in the most attractive and historic parts of Europe, offered by our tour this summer. There are still some vacancies, and we would like to relieve any reader who may be planning a European trip, of the manifold petty details and annoyances that beset the inexperienced traveler by enrolling him or her in our party.

# Our Illustrations

OUR frontispiece this month is an excellent example of the portrait work of Mr. F. Holland Day. This head is broadly and convincingly treated in a manner wholly free from affectations. It shows a skilful arrangement of tones in masses, reduced to the smallest possible number. The rendition of character is convincing, and it is impossible not to be interested in the subject. The half-tone reproduces a portion of the mount, a combination of very light papers.

"April," by J. H. Field, is an extremely characteristic piece of this artist's landscape work. Mr. Field has a feeling for nature, especially in her somber moods, which leads one to predict that he will produce great works in this line.

"The Calf Path," by A. S. Goss of Toronto, a reproduction from a bromide enlargement, shows pleasing simplicity of composition, with an attractive mystery in the goal of the path. The horizontal repetition greatly strengthens the vertical panel.

Mrs. Käsebier's "Portrait" shows skilful subordination of all details to the point of principal interest, the face, with the hands as subordinate spots to balance the picture.

Ralph E. Brown's poplars are admirably situated to produce a strong effect by vertical repetition of line. The background is well chosen to avoid halation, and the whole effect is that of a pleasant, cool retreat.

Miss Weil's picture, "Soap-bubbles," is a charming picture of child life. The poses are unstudied, and the bubbles show that a very short exposure must have been given. The rendition of sunlight is the most successful that has ever come to our notice.

"The Head of the Lake" will be familiar to the readers of the *édition de luxe*, as it appeared in the January number in the form of an original Eastman Sepia print. The beauty of the clouds reflected in the still water makes a very successful picture out of a not especially attractive scene.

Mr. Powers' portrait is a successful piece of straightforward work, and is a good example of what can be done by any amateur at home, with careful work.

"On the Chicago River," by William P. Gunthorp, an excellent example of the marine work possible on our inland seas, has been exhibited at the third San Francisco and the Fourth Chicago Salons.

Mr. Cross' picture of the trailing arbutus, the New England mayflower, is remarkable in that the half-tone block is made directly from the flowers. This is an innovation in flower photography which is capable in skilful hands of producing important results.

Miss Hovey's charming study, "The Picture-book," is a good example of a class of work in which she is very successful, — the portrayal of children. The rapt attention on the subject in hand gives proof that the children were wholly at ease, a prerequisite in such portraiture.

The charming New England homestead in winter garb, entitled "Gray Days," figured in the recent exhibition of the Providence Camera Club, and was universally admired as a bit of snow work. The feeling of the lowering sky is finely rendered, and the picture is technically and artistically elegant.

Mr. Schuler's picture is an excellent example of pyramidal composition and diagonal division of light and shade, closely conforming to classic rules. It is also excellent in pose and expression.

In the next picture, "Coming from the Spring," we have a good piece of genre work on somewhat conventional lines, but well executed. The setting for the figure is attractive, and the picture has an air of verisimilitude which is not always present in work of this class.

"A Day in June" is a pleasant landscape, well composed, well supplied with sky, and well balanced as to light and shade.

Mr. Goss' "January Thaw" admirably shows a fine atmospheric effect, well rendering the sloppiness and murkiness inseparable from this climatic condition, when there is an enormous amount of evaporation. The arrangement of the vertical lines is good. The foreground is possibly a little prominent.

CHILD STUDY
BY JOHN W SCHULER

PHOTO ERA

COMING FROM THE SPRING
BY WM H WHITEHEAD

PHOTO ERA

A DAY IN JUNE
BY L C RANDALL

PHOTO ERA

THE JANUARY THAW
BY A S GOSS

PHOTO ERA

# The Round Robin Guild

Specially designed for the Amateur Photographer and the Beginner

Conducted by Elizabeth Flint Wade

(Any amateur photographer may belong by sending in his name and address)

USES OF ADVERSITY

" A daisy and a berry red
Were nodding in the breeze;
Said the daisy to the berry red,
'Oh, what if it should freeze!'
'Well,' said the berry, 'you would die,
But my fate would be nice;
For I should then be served, you know,
As a Strawberry Ice.'"

To utilize or turn to account one's misfortunes and accidents marks the true philosopher. The first thing which the amateur tries to utilize is his spoiled negatives. One of the most satisfactory ways of using them is to free them from the blackened silver, resensitize them with blue-print solution, then make from them transparencies. The formula was given a year or two ago, but having many requests for it, we repeat it for the benefit of our enlarged circle of Guild members.

To free the plate from the blackened silver, make up one solution of ferricyanide of potassium, 1 oz., and water, 8 oz.; and another solution of 2 oz. of hyposulphite of soda and 8 oz. of water. Mix in equal quantities and leave the plate to soak in it until all the blackened silver is thoroughly eliminated from the gelatine coating. The plate is then washed in running water for half an hour, and dried in a place free from dust.

The solution for sensitizing is the same as that used for sensitizing blue-print paper,— 1 3-4 oz. of citrate of iron and ammonium dissolved in 8 oz. of water, 1 oz. of ferricyanide of potassium dissolved in 8 oz. of water. Lay the plate in a tray, gelatine side up, and turn over enough of the solutions mixed in equal quantities to cover the plate; let it soak for five minutes, drain, and dry in the dark. The process of sensitizing must, of course, be done by gaslight.

To print, the sensitive surface is placed in contact with the film, adjusted in the printing-frame, and exposed to sunlight for the same length of time as for a blue-print. To gauge the time of exposure,— for of course the print cannot be examined to note its progress,—a print is first made on a piece of blue-print paper, the length of time it takes to make a proper print noted, and the plate exposed for the same period. When finished, wash in running water, and dry.

One may use these transparencies in decorative ways. Set in a long narrow frame, with just a narrow division between each picture, they make a pleasing ornament to set on a window ledge or at the top of the dividing sash. They make pretty lamp screens, little square lanterns, trifle boxes, etc., and are always interesting as a window transparency. Much depends on the choice of subject. A landscape is not so pleasing as marines or figures. Seacraft is always a happy selection for a blue transparency. An enthusiastic Guilder, who has been using the above formula, writes, " My blue transparencies are beautiful. I am hoping to spoil some plates soon again, so I can make some more."

While the amateur is not advised to spoil plates for the purpose of making blue transparencies, still, if he has spoiled plates, he will find this a most satisfactory way of turning them to account.

Have you seen a copy of the " Practical Photographer"? If not, then you have a pleasure in store. The " Practical Photographer " is an English magazine, each number of which is devoted to some special phase of photographic work. The PHOTO ERA — as elsewhere advertised — has secured the rights of this magazine in this country and last month published the first number of this admirable series of treatises on photography. The number in question is devoted to directions for trimming, mounting, and framing photographic prints. The amateur learns from it how to hold the knife in trimming, what trimmers are the most practical, how to make square corners and secure parallel edges, what to trim away, and what to leave in a print. On the subject of mounting nothing seems to have been omitted that could be of help in this particular line. Mounts are described and the kinds suitable for certain prints designated. One learns about the color, surface, tone, the proper placing of the print, how to do wet and dry mounting, to mount by edges, and how to make the " built-up " or composite mount. The suggestions on how to mount small prints are specially good. Any one at all handy with tools will be able to follow the directions for frame-making which he will find in this number, and will be able to turn out some very artistic frames, and better suited to his pictures than those found in the shops.

Perhaps the best thing about this magazine is its profuse illustrations which supplement the text, so that one might almost learn by the pictures without the explanation. Some excellent formulas are also given.

We quote one of the " Maxims on Mounting ":—

" Composition is of as much importance in the placing of the print on the mount, as in the placing of the principal object in the picture. Even the size, design, and whereabouts of the artist's signature must be considered in relation to the picture, its position on the mount, its color and subject. In this connection the signature of Japanese

artists may be studied with profit. Their placing is often a small tour de force of composition in itself, and is as truly the result of study as the picture to which it is attached."

If any member of the Guild wishes to have a useful hand-book, and to learn all the newest and best about mounting photographs, he should buy the April number of the "Practical Photographer." The mounting of a photograph now demands as much attention as does the making of the print, and a suitable mount doubly enhances the beauty of a picture.

"This year's May the last year's May repeats" and brings us again the buds and blossoms, and all the fresh delight of green things growing; and it is these same green things growing that make the prettiest sort of decorations when made into "white silhouettes" on photographic paper. The young and delicate leaves of wood plants are specially adapted to corners and borders, as they are usually small and fine. Young ferns, the little "mouse-ear," herb robert, one-berry, small, slender adder's-tongue, Solomon's seal, wild geranium, etc., all have very beautiful-shaped leaves. The young leaves of trees, especially the pinnate leaves of the locust and sumac and the leaves of the birch are all to be sought for when looking for green things for making decorative prints. In making these prints one may use either blue-print paper or the matt finish printing-out paper. The leaves are grouped on a sheet of plain glass in the printing-frame, the paper adjusted over them and exposed to the sunlight until the blue-print paper is a deep bronze or the matt surface paper quite black.

A novel print of this kind is made by arranging the leaves in the center of a vignetting glass, the result being a border shading from white up to the black center on which appear the white outlines of the leaves. Such a print can be used as a negative and a reversed order of the tones obtained. The early leaves of spring make the most satisfactory leaf prints, as their tissues are so transparent that one obtains in the print the fine veining of the leaf which in later summer, when the leaves have turned a dark green, scarcely appear in the print. The blue-prints are washed in water until the whites are clear, while the silver prints are first washed to clear the paper of the free silver, then fixed for five minutes in a solution of hypo in the proportion of one ounce of hypo to ten of water. These prints may be used in a variety of ways, the arrangement of the leaves or vines lending themselves to borders, corners, etc. A frieze of blue-prints placed just above the wainscoting in a child's room proves a great attraction. The child, seeing it every day and being told the names of the leaves thus pictured, unconsciously acquires a knowledge of wood plants which he might never have the opportunity of doing, or at least would need a great deal of study to learn.

"When all the woods are green," and while the green is still of light and delicate hue, is the time to make photographic studies of trees. Trees, for the most part, have been a neglected subject by amateurs, but trees make most interesting photographic studies.

Nearly every locality has its tree patriarch, and trees of historical interest are found in many places, especially through the New England States.

One would find a collection of "tree photographs" interesting to make and a source of pleasure to all who had the good fortune to see it. Then a collection of tree photographs would be in a way an edition de luxe, for they would not be duplicated, and the artist could limit his edition to as few copies as he chose to make.

To add to the interest and the value of the book, one should supplement the pictures with a legend or two about each tree, or with an appropriate quotation. Tree lore, when studied in connection with one's photographs of trees, will be found very fascinating.

The gift of trees is one which is but half appreciated, and "it is harder to replace the living cone of a tree, than to build a granite obelisk." Who of us ever thought of giving thanks for a tree? and yet this is what the East Indian does for the palm tree which is to him house, and raiment, and food, and wine.

"'Allah il Allah!' he sings his psalm,
On the Indian sea, by the isles of balm;
'Thanks to Allah who gives the palm!'"

Latter in the season we are going to offer prizes for the best and most artistic photographs of trees, for this is one of the future subjects of our Round Robin Guild competitions. Hence these hints on making good photographs of trees in the early summer, the best time of the year for tree pictures. The amateur who makes a study of trees will be well paid in the pleasure and profit he will derive from the study.

### WATER-TONE PAPERS

For a long time blue-print paper was the only water-tone paper on the market, though from time to time attempts were made to produce a paper that would give gray or black tones which would develop or fix in water in the same way as the blue-print paper. "Never say fail" is, happily, one of the watchwords of photographic chemists, and by and by the experiments were successful, and we now have water-tone papers which produce very beautiful prints.

The Eastman Sepia paper is one of the favorites. The paper is heavy and has a very rough surface, so it is not adapted for negatives with fine detail, or for small landscapes. It is specially suited to portrait work or for landscapes showing broad masses of lights and shadows. This paper prints very quickly, and the printing is carried just far enough to show the details indistinctly.

To insure best results, the prints should be developed as soon as taken from the printing-frame. To develop the print, it is dipped into running water or into a dish holding quite a quantity of water until the print is developed, the time required being less than half a minute. As soon as the print is developed, it is placed in a tray of hypo, face down, and kept moving for a minute or two to prevent air bubbles forming on the surface. Where an air bubble forms, there appears an ugly brown stain, and this of course spoils the print. The hypo solution

is made up of five grains of hypo to four ounces of water. A convenient way of measuring the amount is to use the powdered hypo and take up as much as will lay on a ten-cent piece, which will be about five grains. The print is left in the hypo for five minutes, then washed well in running water. The tone of the print is varied by leaving it a longer or shorter time in the hypo. The shorter the time the redder the tone, and a longer time gives a purplish brown tone, which is not an unpleasant color for some prints, but as a rule is not as pleasing as the warmer browns and sepias.

This paper is so heavy that it may be cut into cards the size of a postal, a picture printed on the sensitive side, the address and stamp put on the other and sent through the mail as an ordinary post-card. It makes a very desirable medium for illustrated correspondence.

A water-tone paper which gives soft grays and clear blacks is the W. D. Platinum paper. The printing is continued until the outlines or shadows are of a deep canary color. It is then taken from the frame and slipped, face upward, into a tray of hot water, about 125° F. The picture develops immediately in clear blacks and whites, and as soon as the detail is out the print is transferred to a tray containing a solution of muriatic acid, one fourth ounce of the acid to sixteen ounces of water. It is left in this bath five minutes, then washed well and dried.

This paper may be partly printed, then laid face down or placed in a drawer for two or three hours, and at the end of that time the print will be found to be almost developed, the image turning black the same as a printing-out paper.

Another water-tone paper which combines the qualities of the sepia and the platinum water-tone papers is the Carbona paper. With this paper one may obtain a variety of brown tones, — an effect something like a steel engraving, — or a carbon black. It is a paper easy to manipulate, and the prints made on it are very fine.

Water-tone papers are certainly a great boon to the amateur who has little time for printing, and the different tones and qualities of paper enable him to make almost as satisfactory prints as those made by more complicated processes.

### ANSWERS TO CORRESPONDENTS

Wesley Currier. — It is hard to say which is the best developer when each has its claim for superiority and each its adherents, but you will find the metol-hydrochinon developer an excellent developer for all-round work. Take 30 grains each of metol and hydrochinon, 1-2 oz. of sulphite of soda, and 16 oz. of water. This is solution No. 1. A second solution is made of potassium carbonate, 1-4 oz., water 10 oz. To use, take equal parts of both solutions; and for each ounce of the combined solutions, take 1 oz. of water. To intensify an under-exposed plate, make up a solution of 1-2 oz. each of chloride of mercury and chloride of ammonia, and 20 oz. of water. A second solution is made of 1-2 oz. of chloride of ammonia and 20 oz. of water. Wash the plate well, then place in a tray, face upward, and pour over enough of solution No. 1 to cover it well, and let it remain in the solution until the image has turned white, then remove and wash, and place in a tray containing solution No. 2. This solution will turn the plate black; and when it is again darkened, place it for a few minutes in a 10 per cent solution of sulphite of soda. Wash well and dry. If the negative is not dense enough, repeat the process. To keep cards from curling after the prints are dry, dampen the back of the mount after the print is mounted, or lay a square of damp blotter on the back of the mount. When the print is dry, the card will remain flat.

C. N. Gatchell. — The conditions of membership in the Round Robin Guild is that one shall be an earnest worker, and shall do all he can to advance the standard of photography. The name and address, and a note saying one wishes to become a member of the Guild, are all the steps necessary to become a member. A membership card and circular has been sent you.

Harry French. — You can make lantern slides from your kodak films by contact printing. They are developed in the same way as a negative, only the picture comes up a positive instead of a negative. Direction for making lantern slides will be found in recent numbers of the PHOTO ERA. In the March number, Round Robin Guild department, will be found an excellent formula for developing lantern slides.

W. B. — Scales for weighing grains may be purchased as low as fifty cents. There are tiny scales, called pocket scales, for this price which would answer your purpose as well as the more expensive scales.

Bertha D. F. — To clean bottles which have a deposit on the inside from solutions standing in them, take a handful of fine shot, drop it into the bottle, add a little washing soda, fill the bottle a third full of water, then shake well. The shot will clean the deposit from the glass and leave it as clear as when first used.

Art. H. — A panorama camera is an excellent supplement to the ordinary camera, but not desirable for an all-round camera. If you intend to take snap-shots at the St. Louis Fair, then I would advise a film camera, as that is the most convenient and most easily managed. You can have enlargements made from any of your negatives.

T. T. S. — I cannot say what month would be the most desirable for picture-making at the Fair as I know nothing of the atmospheric conditions, but should think May or early in June. The summer months will doubtless be very hot there, and by autumn the glory of the Ivory City will be waning.

# Notes and News

ST. LOUIS, MO. For the information of the army of devotees of the camera who will attend the Exposition, we take pleasure in quoting the following ruling of the Exposition Company as to the use of cameras on the grounds: —

"Visitors to the Exposition will be permitted to take hand cameras into the grounds and use them without charge."

With regard to exhibits, the rule adopted is as follows: —

"No exhibit or object upon exhibition may be sketched, copied, or reproduced in any way whatever without the permission of the exhibitor, approved by the Director of Exhibits."

CLEVELAND, OHIO The first annual exhibition of work by members of the Cleveland Camera Club was opened to the public, at the Club's quarters, April 25, and will continue on view until May 15.

Fifty-seven framed prints, representing the work of fifteen members, are hung, and the selection, which was in the hands of the Club's Print Committee, Messrs. Baker, Semon, and Marvin, has been such that an extremely creditable show has resulted.

It is the intention of the Club to make this members' exhibit an annual affair, and it is expected that much good will result therefrom in the way of increased interest in the art and improvement in the quality of work, as exhibitions of this kind are, perhaps, as useful in these respects as shows of a more pretentious character, to which so many clever but modest amateurs hesitate to submit their work.

HOBOKEN, N. J. The Elysian Camera Club, Hoboken, N. J., began a competition, Jan. 1, 1903, offering a cup to the member exhibiting the finest marine subject during the year, each member to be permitted to exhibit but one view. The cup has been awarded to Mr. William Peterson, who made the winning negative with a Bausch & Lomb Plastigmat Lens. The Bausch & Lomb Optical Company, Rochester, N. Y., would be glad to have the addresses of all photographers who win prizes with negatives made with their lenses, and to arrange with them for copies of the prize-winning prints.

## PHOTOGRAPHIC EXHIBITIONS AND COMPETITIONS

| Society or Title | Date | Entries Close | Inquire of |
|---|---|---|---|
| Capital Camera Club, Washington | Apr. 30–May 11 | Apr. 9 | Francis C. Crow, 2317 Pa. Ave., N. W., Washington, D. C. |
| Salon de l'Exposition, Arras | May 1–Oct. 4 | Apr. 5 | Comité de l'Exposition, Arras, France. |
| Salon du Photo Club de Paris | May 3–June 5 | Mar. 15 | M. Paul Bourgeois, 44 rue des Mathurins, Paris, France. |
| Louisiana Purchase Exposition | May–Nov. | Apr. 1 | John A. Ockerson, Chief, Dept. Liberal Arts, St. Louis. |
| First International Salon in The Hague | June 12–July 24 | June 1 | Sekretariat Haag, Conradkade 63, The Hague, Netherlands. |
| Wiener Photographische Gesellschaft | July 14 | May 1 | W. P. G., Karmelitergasse 7, Vienna, Austria. |
| International Photographic Exposition, Berlin | Oct. 1–30 | Sept. 1-20 | Herr Franz Goerike, Berlin, W. 62, Maassenstr. 32, Germany. |
| " Lantern-slide Competition | Oct. 15 | Oct. 15 | M. M. Vanderkindere, Palais du Midi, Brussels, Belgium. |
| " Stereogram Competition | Oct. 15 | Oct. 15 | " " " " |
| Hove Camera Club | Nov. 23 | ..... | A. R. Sargeant, 55, the Drive, Hove, Eng. |
| Southsea Photographic Society | Dec. 8 | ..... | F. J. Lawton, 20 Clarence St., Gosport, Eng. |
| Southampton Camera Club | Dec. 13 | ..... | S. G. Kimber, Oakdene, Highfield, Southampton, Eng. |
| First American Photographic Salon, New York | Dec. 1904 | ..... | S. C. Bullenkamp, 102 West 101st St., New York. |
| Northern Photographic Exhibition | June–July, 1905 | ..... | F. G. Issott, 62 Compton Road, Harehills, Leeds, Eng. |

| Giver | Closes | Prizes |
|---|---|---|
| Kodak N. C. Film Competition | June 10 | £500—209 prizes. |
| Kodoid Plate Competition | June 10 | £300—99 " |
| Kodak Developing Machine Competition | June 10 | £200—96 " |
| Photo-American, Stamford, Conn. | July 1 | $5 in goods. |
| The Photographer, New York, (Frontispiece) | July 1 | $130, $75, $25. |
| " " " " " | Monthly | $15, $10. |
| Photogram, Arundel St., Strand, London | Monthly | One guinea and half guinea. |
| The American Boy, Detroit | Monthly | $2, $1. |
| National Sportsman, Boston | Monthly | $5, $3, $1, $1. |
| Browning's Magazine, Boston | Monthly | $5, $3, $2. |
| The Book-Lover, New York | Monthly | $5, $3, $2, $1. |
| American Amateur Photographer | Monthly | $5. |
| Leslie's Weekly, New York | Weekly | $10, $5, $1. |
| Buffalo Express | " | $5 to $25. |
| New York Evening Mail | " | $5. |
| Commercial Advertiser, New York | " | $3, $3, $2, $1. |
| St. Louis Star | " | $5. |